(b) Purged and pressurized equipment that meets NFPA No. 496 or IEC 79–2.

[CGD 94–108, 61 FR 28284, June 4, 1996]

§111.105–9 Explosionproof and flameproof equipment.

Each item of electrical equipment that is required in this subpart to be explosionproof under the NEC classification system must be approved as meeting UL 1203. Each item of electrical equipment that is required in this subpart to be flameproof must be approved as meeting IEC 79–1.

[CGD 94–108, 61 FR 28284, June 4, 1996]

§111.105–11 Intrinsically safe systems.

(a) Each system required under this subpart to be intrinsically safe must use approved components meeting UL 913 or IEC 79–11(I_a).

(b) Each electric cable of an intrinsically safe system must—

(1) Be 50 mm (2 inches) or more from cable of non-intrinsically safe circuits, partitioned by a grounded metal barrier from other non-intrinsically safe electric cables, or a shielded or metallic armored cable; and

(2) Not contain conductors for non-intrinsically safe systems.

(c) As part of plan approval, the manufacturer must provide appropriate installation instructions and restrictions on approved system components. Typical instructions and restrictions include information addressing—

(1) Voltage limitations;

(2) Allowable cable parameters;

(3) Maximum length of cable permitted;

(4) Ability of system to accept passive devices;

(5) Acceptability of interconnections with conductors or other equipment for other intrinsically safe circuits; and

(6) Information regarding any instructions or restrictions which were a condition of approval of the system or its components.

(d) Each intrinsically safe system must meet ISA RP 12.6, except Appendix A.1.

[CGD 94–108, 61 FR 28284, June 4, 1996, as amended at 62 FR 23909, May 1, 1997]

§111.105–15 Additional methods of protection.

Each item of electrical equipment that is—

(a) A sand-filled apparatus must meet IEC 79–5;

(b) An oil-immersed apparatus must meet either IEC 79–6 or NEC article 500–2;

(c) Type of protection ''e'' must meet IEC 79–7;

(d) Type of protection ''n'' must meet IEC 79–15; and

(e) Type of protection ''m'' must meet IEC 79–18.

[CGD 94–108, 61 FR 28284, June 4, 1996]

§111.105–17 Wiring methods for hazardous locations.

(a) Through runs of marine shipboard cable meeting subpart 111.60 of this part are required for all hazardous locations. Armored cable may be used to enhance ground detection capabilities. Additionally, Type MC cable may be used subject to the restrictions in §111.60–23.

(b) Where conduit is installed, the applicable requirements of either the NEC or IEC 79 must be followed.

(c) Each cable entrance into explosionproof or flameproof equipment must be made with approved seal fittings, termination fittings, or glands that meet the requirements of §111.105–9.

(d) Each cable entrance into Class II and Class III (Zone 10, 11, Z, or Y) equipment must be made with dust-tight cable entrance seals approved for the installation.

[CGD 94–108, 61 FR 28284, June 4, 1996, as amended at 62 FR 23909, May 1, 1997]

§111.105–19 Switches.

A switch that is explosionproof or flameproof, or that controls any explosionproof or flameproof equipment, under §111.105–19 must have a pole for each ungrounded conductor.

[CGD 94–108, 61 FR 28284, June 4, 1996]